# § 28.875 Radar, depth sounding, and auto-pilot.

- (a) Each vessel must be fitted with a general marine radar system for surface navigation with a radar screen mounted at the operating station, and facilities on the bridge for plotting radar readings.
- (b) Each vessel must be fitted with a suitable echo depth sounding device.
- (c) Except as provided in 33 CFR §164.15, when the automatic pilot is used in areas of high traffic density, conditions of restricted visibility, and all other hazardous navigational situations, the master or person in charge shall ensure that:
- (1) It is possible to immediately establish manual control of the unit's steering:
- (2) A competent person is ready at all times to take over steering control; and
- (3) The changeover from automatic to manual steering and vice versa is made by, or under the supervision of, the officer of the watch.

## §28.880 Hydraulic equipment.

- (a) Each hydraulic system must be so designed and installed that proper operation of the system is not affected by back pressure in the system.
- (b) Piping and piping components must be designed with a burst pressure of not less than four times the system's maximum operating pressure.
- (c) Each hydraulic system must be equipped with at least one pressure relieving device set to relieve at the system's maximum operating pressure.
- (d) All material in a hydraulic system must be suitable for use with the hydraulic fluid used and must be of such chemical and physical properties as to remain ductile at the lowest operating temperature likely to be encountered by the vessel.
- (e) Except for hydraulic steering equipment, controls for operating hydraulic equipment must be located where the operator has an unobstructed view of the controls for operating hydraulic equipment and the adjacent work area. Protection shall be afforded to the operator of hydraulic equipment against falling or swinging objects and/or cargo.

- (f) Controls for hydraulic equipment must be so arranged that the operator is able to quickly disengage the equipment in an emergency.
- (g) Hydraulically operated machinery must be fail-safe or equipped with a holding device to prevent uncontrolled movement or sudden loss of control due to loss of hydraulic system pressure. A system is considered to be fail-safe if a component failure results in a slow and controlled release of the load so as not to endanger personnel.
- (h) Nonmetallic flexible hose assemblies must only be used between two points of relative motion, limited to the least amount of length that will afford maximum multidirectional movement of the equipment served.
- (i) Hose end fittings must comply with SAE J1475, (Hydraulic Hose Fittings For Marine Applications). Field attachable fittings must be installed following the manufacturer's recommended practice (method).
- (j) Nonmetallic flexible hose shall be marked with the manufacturer's name or trademark, type or catalog number and maximum allowable working pressure.
- (k) Existing hydraulic piping, nonmetallic hose assemblies, and components may be continued in service so long as they are maintained in good condition to the satisfaction of the Coast Guard Representative, but all new installations, or replacements shall meet the applicable specifications or requirements of this section.

#### §28.885 Cargo gear.

- (a) The safe working load (SWL) for the assembled gear shall be marked on the heel of each cargo boom, crane, or derrick. These letters and figures are to be in contrasting colors to the background and at least one inch in height. The SWL is construed to be the load the gear is approved to lift, excluding the weight of the gear itself.
- (b) All wire rope, chains, rings, hooks, links, shackles, swivels, blocks, and any other loose gear used or intended to be used in cargo loading or unloading must be commensurable with the SWL rating in paragraph (a) of this section. This gear shall be visually inspected by the vessel's captain or his designee at frequent intervals,

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and in any event not less than once in each operating month.

- (c) In addition to the inspection required in paragraph (b) of this section, a biennial, (every second year), thorough examination and proof load test, at a minimum of the SWL rating, shall be performed and witnessed by competent personnel. The proof load applied to the winches, booms, derricks, cranes and all associated gear shall be lifted with the ship's normal tackle with the boom or derrick at the lowest practicable angle. When the load has been lifted, it shall be swung as far as possible in both directions.
- (d) After satisfactory completion of the tests and examinations required in paragraphs (b) and (c) of this section, all results and notations together with the date and location of each shall be maintained and available to Coast Guard representatives upon request.

# § 28.890 Examination and certification of compliance.

- (a) At least once in every two years each ATA vessel must be examined for compliance with the regulations of this subchapter by the ABS, a similarly qualified organization, or a surveyor of an accepted organization.
- (b) Each individual performing an examination under paragraph (a) of this section, upon finding the vessel to be in compliance with the requirements of this chapter, must provide written certification of compliance to the owner or operator of the vessel.
- (c) Each certification of compliance issued under paragraph (b) of this section must:
- (1) Be signed by the individual that performed the examination:
- (2) Include the name of the organization the individual performing the examination represents or the name of the accepted organization the individual belongs to; and
- (3) State that the vessel has been examined and found to meet the specific requirements of this chapter.
- (d) A certification of compliance issued under paragraph (b) of this sec-

tion must be retained on board the vessel until superseded.

(e) A copy of the certification of compliance issued under paragraph (b) of this section must be forwarded by the organization under whose authority the examination was performed to the Coast Guard District Commander (Attention: Fishing Vessel Safety Coordinator) in charge of the district in which the examination took place.

#### § 28.895 Loadlines.

- (a) A fish tender vessel of not more than 500 gross tons, engaged in the Aleutian trade, is not subject to the loadline provisions of 46 U.S.C. Chapter 51 if it is not on a foreign voyage and the vessel:
- (1) Operated in this trade before September 8, 1990; or
- (2) Was purchased to be used in this trade before September 8, 1990 and entered into service before June 1, 1992; and
- (3) Has not undergone a major conversion; and
- (4) Has not had a loadline assigned at any time before November 16, 1990.
- (b) The exemption from the loadline provision of 46 U.S.C. Chapter 51 set forth in paragraph (a) of this section expires on January 1, 2003.

# §28.900 Post accident inspection.

The requirements for providing notice and reporting of marine casualties are contained in part 4 of this chapter. The owner of or master of the vessel shall ensure that the survey guidance provided by a Coast Guard Representative is effectively carried out, that the material and the workmanship of such repairs or renewals are in all respects satisfactory, and that the vessel complies in all respects with the regulations in this part.

# §28.905 Repairs and alterations.

No repairs or alterations affecting the safety of the vessel with regard to the hull, machinery, or equipment, shall be made without the notification of a Coast Guard Representative.